

Date: Wed, 16 Jun 93 11:31:22 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #736
To: Info-Hams

Info-Hams Digest Wed, 16 Jun 93 Volume 93 : Issue 736

Today's Topics:

 6M multi-hop Es to the US
 Are we losing our technical abilities?
 BUYING COAX
 CQ Alaska, Florida, or Idaho
 Entry Level HF Rigs
 Field Day Power.
 ham radios in movies (Jurassic Park)
How should feedline run to vertical folded dipole? (2 msgs)
 Need 820 power requirements
 Need tubes for Nazi field radio (2 msgs)
 North Cooks on 80???
 SB200 power supply problems - help please.
 subscribe

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 16 Jun 1993 16:39:58 GMT
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!noc.near.net!
news.bbn.com!petra!popovich@network.UCSD.EDU
Subject: 6M multi-hop Es to the US
To: info-hams@ucsd.edu

>In contests, it is common (at least in EU) to include all 6 characters of the
>square in the test report. In "normal" qso's, it varies. I think most
>operators will accept the first 4. I normally exchange all 6, but reduces
>to 4 on marginal conditions.

BTW, can somebody tell me how one might find out the last 2 characters of one's own grid square? Perhaps this is an FAQ, but although I've seen several ARRL publications with coarse-grained maps (providing the first 4 characters), I've never seen anything that can tell me the @#\$\$%* last 2, so I try to estimate where I am in that big square and make a wild-assed guess. There's got to be a better way that doesn't involve PC software (I don't own a PC). I'm getting tired of only telling people my first 4, and having to make one up for things like packet BBS's that want QTH information.

-Steve

Date: 16 Jun 1993 15:41:48 GMT
From: concert!gatech!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!phys.ksu.edu!tipping@decwrl.dec.com
Subject: Are we losing our technical abilities?
To: info-hams@ucsd.edu

In article <1vllka\$d98@morrow.stanford.edu>
BR.SJE@forsythe.stanford.edu (Steve Eastman) writes:
>In article <1vli8k\$756@techbook.techbook.com>,
>genew@techbook.techbook.com (Gene Wolford) writes:
>>
>>-----
>>Smoky the ham says:
>> Only you
>> ^^^
>> can prevent ham radio becoming the next Citizens Band.
>
>Techno-nurd the ham says:
> Only you
> ^^^
> can prevent ham radio becoming the next sub-atomic particle physics
> of quark spin in zero gravity on a Tuesday afternoon
> in the shade
>
>

I think these two people are taking extreme views. I fall somewhere in between as probably does most every other ham. I am an atomic physicist, but I typically don't do atomic physics while on the radio. My main interest in amateur radio is emergency communications. I am currently using a license study guide to "cram" for an exam (I'm testing for element 4B tonight). If I'm going to do the "technology" thing, I'm going to need a stack of reference books, a computer, a couple of colleagues, and a lot of telephone calls. So far, I haven't

been to an exam session where the VEs would let me use that stuff.
The people that are going to do "technology," will continue to do
"technology." I feel that we are not losing "technology," we are
gaining expertise in other areas (digital communications modes, etc.).

Just my opinion...

Tracy

```
=====
Tracy N. Tipping                      Work: (913) 532-6782
Laboratory Safety Officer            FAX: (913) 532-6806
James R. Macdonald Laboratory        Home: (913) 539-1378
Cardwell Hall                       Amateur Radio: N00EY
Kansas State University              tipping@phys.ksu.edu
Manhattan, KS 66506-2604             tipping@ksuvm.bitnet
=====
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Date: Wed, 16 Jun 1993 15:19:06 GMT
From: news.cerf.net!pagesat!netsys!agate!usenet.ins.cwru.edu!neoucom.edu!
wtm@network.UCSD.EDU
Subject: BUYING COAX
To: info-hams@ucsd.edu

I bought some flexible 9913-like cable from Cable Experts (see ads
in ham magazines). The loss and propagation velocity are the same
as Belden's 9913, but the Cable Experts stuff has a stranded center
conductor which makes it much easier to work with. Highly
recommended, if not inexpensive.

--
Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED/AA

Date: 16 Jun 93 10:49:28 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: CQ Alaska, Florida, or Idaho
To: info-hams@ucsd.edu

In article <01GZFSKEP4NM8WVYWR@IRIS.UNCG.EDU>, MOSIER@steffi.uncg.EDU
(Steve Mosier) wrote:
> Are there any netters out there in Florida, Alaska, or Idaho with 2x1, 1x2,

> or 2x2 "A" calls who would be willing to try a 75 meter phone sked in the
> extra-class portion of the band? That's all I need for the 75m WAS award,
> and the Geratol Net (which meets for that purpose) doesn't start up again
> until October.

steve-

What is the significance of the 2x1, et cetera, "A" call letters? While my
call doesn't meet your specifications, I can operate 75 Meters from my
mobile, on the Extra Class frequencies.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 16 Jun 93 12:35:37 GMT
From: [pacbell.com!iggy.GW.Vitalink.COM!wetware!spunky.RedBrick.COM!psinntp!
psinntp!gdc!kurdzo@decwrl.dec.com](mailto:pacbell.com!iggy.GW.Vitalink.COM!wetware!spunky.RedBrick.COM!psinntp!psinntp!gdc!kurdzo@decwrl.dec.com)
Subject: Entry Level HF Rigs
To: info-hams@ucsd.edu

Mike Ellerson (mellerso@uga.cc.uga.edu) wrote:
> Is it worth paying extra for 6M on the Icom 729 and
> Kenwood TS690 ? Do any of these units have a better receiver section than

I have had an ICOM 729 for several months now. The main reason I bought
the rig was to get 6m. If you will ever consider getting into 6m,
get one of these rigs. For about an extra \$250, you get a superb
all mode 6m capability. The Kenwood has a few more bells and whistles
and gives you 50W on 6m (rather than 10W with the 729). I use a 10-in/
100-out linear with the ICOM. The rig has performed flawlessly for me!

--

Jim Kurdzo N1KKA
General DataComm
Middlebury, CT 06762-1299
(203) 574-1118 x6443
kurdzo@gdc.com

Date: Wed, 16 Jun 1993 10:31:59 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!kd4nc!ke4zv!gary@ames.arpa
Subject: Field Day Power.
To: info-hams@ucsd.edu

In article <POPOVICH.93Jun15120112@cyclades.ma30.bull.com>

popovich@cyclades.ma30.bull.com (Steve Popovich) writes:

>> Really, if you're using a fire tower, why not decorate it with a
>>couple of strings of construction lights, tastefully wound around the
>>exterior? :-) :-) :-)

>

>Great idea, Bruce. With the antennas up on the fire tower, though,
>why not save the power for all kinds of other gadgets? Just mount
>fluorescent tubes all over the tower, and the whole thing will blink
>off and on in time with your Morris! You can even have QSOs with
>other Field Day stations who happen to be in your line of sight.
>Let's see...does visible light count for "Above 300 GHz", or whatever
>that highest-frequency ham band is? And is a QSO on this band legal
>for a multiplier under the Field Day rules?

> -Steve

Yes, but the detector has to be electronic. Using the Mk I eyeball
doesn't qualify.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Wed, 16 Jun 1993 14:04:08 GMT

From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!

ux1.cso.uiuc.edu!news.cso.uiuc.edu!freeman@network.UCSD.EDU

Subject: ham radios in movies (Jurassic Park)

To: info-hams@ucsd.edu

Eric E. Snyder (eesnyder@boulder.Colorado.EDU) wrote:

>

> Ok, no one has mentioned Jurassic Park so far....

>

> Did anyone get an ID on those cute white radios used towards the
> end of the movie when Laura Dearn dodges the raptors to reset the
> park power supply? Maybe they were Motorola commercial rigs? Maybe
> not. Anyway, it made me want to run out and buy a headset with boom
> mic.

>

>

> Eric E. Snyder

> Department of MCD Biology

...making feet for childrens' shoes.

> University of Colorado, Boulder
> Boulder, Colorado 80309-0347

Is there no place one can and *not* hear about this hype monster?
sigh

Date: Wed, 16 Jun 1993 10:34:06 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!kd4nc!
ke4zv!gary@network.UCSD.EDU
Subject: How should feedline run to vertical folded dipole?
To: info-hams@ucsd.edu

In article <edu-150693151807@right.dom.uab.edu> edu!uab!dpo!uabdpo!gila005
(stephen Holland) writes:

>I am putting up a folded dipole fed from twin lead. It will hang
>off a balloon. Will there be a problem if I just let the twin lead
>feed line hang alongside the folded dipole? I had planned on
>offsetting the feedline so it would be about 1/2 to 1 wavelength
>off to the side, but if I do not have to it would simplify matters.

Yes Steve, you should be concerned about this. Having the feedline
parallel the radiator will induce antenna currents into it as well
as distorting the antenna pattern. You should use end fed antennas
for balloons.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Wed, 16 Jun 1993 13:21:59 GMT
From: agate!howland.reston.ans.net!gatech!udel!gvls1!rossi@ames.arpa
Subject: How should feedline run to vertical folded dipole?
To: info-hams@ucsd.edu

In article <1993Jun16.103406.27218@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)
writes:

>In article <edu-150693151807@right.dom.uab.edu> edu!uab!dpo!uabdpo!gila005
(stephen Holland) writes:
>>I am putting up a folded dipole fed from twin lead. It will hang
>>off a balloon. Will there be a problem if I just let the twin lead

>>feed line hang alongside the folded dipole? I had planned on
>>offsetting the feedline so it would be about 1/2 to 1 wavelength
>>off to the side, but if I do not have to it would simplify matters.
>
>Yes Steve, you should be concerned about this. Having the feedline
>parallel the radiator will induce antenna currents into it as well
>as distorting the antenna pattern. You should use end fed antennas
>for balloons.

I am planning to use an end feed 1/2 wave "balloon vertical" on 20 meters for field day. I have tested its operation using a simple pi-network matching circuit/tuner. Since I will be running only 5 watts I am able to get away with using a small broadcast band type variable caps in the tuner. The tuner is mounted to a short ground stake. The antenna wire goes to the tuner input and the balloon tether line is tied to the ground stake. A short coax runs from the tuner to the SWR bridge then a longer run of coax along the ground to the radio.

I tried it in my backyard last weekend and seemed to work fine. I hope it works as well at the beach on FD.

=====

Pete Rossi - WA3NNA

rossi@VFL.Paramax.COM

Paramax Systems Corporation - a Unisys Company
Valley Forge Engineering Center - Paoli, Pennsylvania

=====

Date: Mon, 14 Jun 93 12:14:44 PDT
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!
usenet.ins.cwru.edu!gatech!destroyer!cs.ubc.ca!mala.bc.ca!oneb!ham!
emd@network.UCSD.EDU
Subject: Need 820 power requirements
To: info-hams@ucsd.edu

HWells.El_Segundo@xerox.COM writes:

>
> A friend has asked that I design a mobile 12 volt power supply to run an 820.
> Will someone please provide the voltage and current requirements for an 820.
> I'm told the total power is 200 watts. I suspect that PEP is 200 watts, but
> don't know as I'm not familiar with the radio.
>
> 73
> Thank you in advance
>

> Hugh Wells, W6WTU

Why bother? The TS-820 came with an optional DC power supply, the DS-1A. It was a DC-DC converter, and when you unplug the AC line cord, you plug in the DC line cord, and the power supply functions. Get the 820 service manual if you can't find a DS-1A, as the circuit looks really simple - basically a couple of transistors in a multivibrator arrangement with a transformer.

Robert Smits
VE7EMD
Ladysmith B.C.
e-mail: emd@ham.almanac.bc.ca

There is *no* idiotproof filter.
Idiots are proof against anything!
- Richard Chycoski, VE7CVS

Date: Wed, 16 Jun 1993 12:39:24 GMT
From: pravda.sdsc.edu!news.cerf.net!usc!sdd.hp.com!apollo.hp.com!hpwin052!hpqmoea!
dstock@network.UCSD.EDU
Subject: Need tubes for Nazi field radio
To: info-hams@ucsd.edu

Curiously, I'd use the same argument for the opposite opinion.

As has been said, many Germans opposed the Nazis, by fleeing the regime (and then fighting against it) or by opposing it in Germany (and then usually dying). What proportion of troops were compelled to fight against their wishes is unknown, but likely significant.

To refer to the perpetrators of WWII as "German" is unkind to these people. I think "Nazi" is exactly the right word to use.

PS: a certain major US company has a " Government" radio division. I expect their products are neither made nor used by members of the US government, although the US government did set in train their manufacture and use. It seems a usefully descriptive name.

All my own, finest, home-grown opinions,

David GM4ZNX

Date: Tue, 15 Jun 93 09:50:45 PDT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!
destroyer!cs.ubc.ca!mala.bc.ca!oneb!ham!emd@network.UCSD.EDU
Subject: Need tubes for Nazi field radio
To: info-hams@ucsd.edu

rrogers@watson.ibm.com (Ryan Rogers) writes:

>
> Its been suggested that I consult the vast wisdom of this group in
> search of some information. I recently acquired a WWII Nazi field
> radio which is in excellent condition, however; it lacks tubes.
>
> Fortunately, the inside of the radio contains a schematic (in German,
> of course) for the unit. The schematic indicates what I believe is the
> type and/or part number for each of the five tubes. Here they are:
>
> - DCH11
> - DF11
> - DAF11
> - DL11
> - UY11
>
> On another newsgroup I was informed that these were 1.2V filament tubes
> and that they might not be too easy to come by. Can anybody share some
> additional light? Gee...I wish there was a rec.radio.antique!
>

There is. At least, there's a mailing list called the boat anchor list
that talks about almost nothing else but radios that use thermionic
emission, :-)

To get on, contact Paul Prescott, N1AAC by e-mail @

boatanchors-request@gnu.ai.mit.edu

and request you be added to the list.

73, Bob.

Robert Smits
VE7EMD

There is *no* idiotproof filter.
Idiots are proof against anything!

Ladysmith B.C.
e-mail: emd@ham.almanac.bc.ca

- Richard Chycoski, VE7CVS

Date: Wed, 16 Jun 1993 13:50:52 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!col.hp.com!fc.hp.com!jayk@ames.arpa
Subject: North Cooks on 80???
To: info-hams@ucsd.edu

Steve Milewski (milewski@oregon.uoregon.edu) wrote:
: This morning ZK1AJJ/ZK1 on North Cook was coming thru to the West Coast on
: 40 CW loud and clear (1420 UTC). Has anyone heard him on 80 meters? If so,
: what time has he been operating?

He was on cw this morning (6/16) around 1200Z at 3501. Few takers.

73, Jay K0GU jayk@fc.hp.com

Date: Wed, 16 Jun 1993 10:14:37 GMT
From: agate!howland.reston.ans.net!gatech!kd4nc!ke4zv!gary@ames.arpa
Subject: SB200 power supply problems - help please.
To: info-hams@ucsd.edu

In article <C8osv5.Jop@fc.hp.com> perry@fc.hp.com (Perry Scott) writes:
>

>Maybe someone can explain the rationale for the swamping resistors and
>transient capacitors to me. The explanation given in the ARRL Handbook
>doesn't go into detail - it just says you have to have them. Maybe we
>have better technology now than at the time the article was written.

The resistors swamp out the differences in reverse leakage of the diodes. Without the resistors, the diode string forms a voltage divider with the voltage across each device proportional to it's reverse leakage resistance. Thus the best diode gets the most voltage dropped across it. With the swamping resistors being lower in value than any expected reverse leakage, this tendency is removed.

Example, suppose there are two diodes in a leg. One has 100 Megohm leakage, and the other has 200 Megohm leakage. The latter, a better diode, will have two thirds of the applied voltage across it while the other will only have one third. If the the peak inverse voltage rating of the diodes is 1,000 volts and the applied voltage is 2,000 volts, the good diode will have 1,333 volts across it and will fail. Now put 10 Megohm resistors across each diode. The leakage resistances will be swamped, and each will see 1,000 volts dropped across it.

As diodes have gotten better, the leakage resistance has gotten larger, but there's still considerable variation from unit to unit. If you have access to a high voltage leakage detector, you can match units so that the swamping resistors are unnecessary. Otherwise, you still need to use the resistors.

A similar thing happens with junction capacitance. A capacitive voltage divider is formed, and this time the diode with the lowest capacitance has the most voltage dropped across it. By putting larger capacitors across the diodes, this too can be swamped. The package inductance is usually so small it can be ignored at power line frequencies.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 16 Jun 93 17:26:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: subscribe
To: info-hams@ucsd.edu

Subscribe Jim Jacobsen (N9IE0)
internet: n9ieo@siucvmb.siu.edu

Date: Wed, 16 Jun 1993 09:47:48 GMT
From: agate!howland.reston.ans.net!gatech!kd4nc!ke4zv!gary@ames.arpa
To: info-hams@ucsd.edu

References <C8nAqG.4px@athena.cs.uga.edu>, <1993Jun15.141003.22243@ke4zv.uucp>,
<1v17lpINN79h@network.ucsd.edu>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: Digital microwave project

In article <1v17lpINN79h@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:

>gary@ke4zv.UUCP (Gary Coffman) writes:

>>>>Strictly speaking, all such transmissions are prohibited, even the
>>>>midi sequences. The rules don't specify the format, only the content.

>

>Indeed, one could not, under that opinion, legally send images of sheet
>music, or speak sequences of notes over ham radio.
>
>Luckily, however, the rule of law is tempered to justice by reason.
> - Brian

Well you'd hope so Brian. However, we used to play music over the
ID slide during the warm up period for our transmitter at sign on.
We were cited. The commission said we weren't licensed as a radio
station and couldn't play music without accompanying *moving*
video. So I wouldn't be so sure that they use good judgement
in interpreting the rules.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 16 JUN 93 09:45:38
From: pa.dec.com!uvo.dec.com!janix.unt.dec.com!ryn.mro4.dec.com!
cimfie.enet.dec.com!taber@decwrl.dec.com
To: info-hams@ucsd.edu

References <1993Jun14.144241.17691@ke4zv.uucp>, <C8nAqG.4px@athena.cs.uga.edu>,
<1993Jun15.141003.22243@ke4zv.uucp>
Subject : Re: Digital microwave project

In article <1993Jun15.141003.22243@ke4zv.uucp>, gary@ke4zv.uucp (Gary Coffman)
writes...

>>Actually, the FCC's intentions are clear, and are not quite what you
>>said. Transmission of descriptions of music is OK so long as the music
>>cannot be directly demodulated as such with ordinary radio equipment
>>-- that is, you can transmit all the MIDI sequences you want, but don't
>>transmit music as audio on FM, AM, or SSB.
>

>And exactly *where* in the rules does it say that? Part 97.113(d)
>flatly prohibits the transmission of music. It does not specify a
>modulation encoding. This part deals strictly with content, and
>not the method used to convey that content.

Good analysis IFF part 97 was the only word on the subject. But it's
not. I believe the ARRL has already asked for guidance on the regulation
and have been told that "music" in that regulation means, as any

rational person would expect, music as you hear it in the broadcast band. It does not mean other methods of representing music and does not mean music picked up in the background when public service operators are working a parade or music incidentally picked up from your car radio when you're talking on the repeater.

It is common, and in fact required, that regulatory bodies give interpretation of their regulations those interpretations aren't as binding as the regulations themselves, but they are binding to a lesser extent and can be depended upon for day-to-day operation.

So give the armchair lawyer act a break.

>>>==>PStJTT

End of Info-Hams Digest V93 #736
